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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,269	06/16/2006	Richard Arthur Birch	056222-5098	2659

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EXAMINER

NGUYEN, THUY-AI N

ART UNIT	PAPER NUMBER
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1796

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05/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,269	Applicant(s) BIRCH ET AL.	
	Examiner THUY-AI N. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5- 6, and 8- 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5- 6, and 8- 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's Request for Continued Examination has been fully considered.

Claims 2- 4, 7, and 15- 19 are cancelled. Claims 1, 9, 10 and 13 are amended. Claims 1, 5- 6, and 8- 14 are pending.

Responding to the claim amendment, claim objection has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5- 6, and 8- 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birch et al. (US. 2003/0180340) in view of Allen et al. (US. 2001/0016566).

Regarding claim 1, Birch et al. teach a process for the production of particle comprising:

a) preparing an aqueous slurry by mixing together the soluble encapsulating material (maltose syrup), an aqueous solution (water), core material (polymer slurry) and perfume [0133 and 0134],

b) passing the mixture into an extruder and heating the slurry to reduce the water content in the extruder [0090 and 0135- 0141], wherein the temperature of the extrusion including stages 3 to 5 is above the glass transition temperature and can be lower than the melting point [0090],

c) extruding through die [0090 and 0134], wherein the extrusion is carried out at a temperature of from 20 to 130 degree of Celsius, which is above the glass transition temperature of the encapsulating material [0090]. Because Birch et al. teach the same encapsulating material used at the same range of temperature as said, the temperature of the extruded material is not more than 25 degree of Celsius above the glass transition temperature of the encapsulating materials,

d) cutting and producing the product in form of particles [0090].

According to the MPEP, the transposition of process steps or the splitting of one step into two, where the process are substantially identical or equivalent in terms of function, manner and result, was held to not patentably distinguish process, see *Exparte Rubin*, 128 USPQ 159 (PO BdPatApp 1959)

Birch et al. do not teach to reducing the water content to less than 15 percent by weight. However, it would be obvious to one of ordinary skill in the art to optimize the reduced amount of water of the composition during the experiment in the same condition as said to obtain a desired mixture for extrusion in form of slurry. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie

Art Unit: 1796

case of obviousness. See *In re Boesch*, 617 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir).

Birch et al. teach that the process of making the particles by any extrusion [0089]. However, Birch et al. do not specifically teach the method of making the composition comprising the extruder that has an internal diameter greater than 45 mm as recited in claim 1 by the applicant. Allen et al. teach the method of making the solid bar detergent comprising the extrusion process (abstract), wherein the extruder is twin screw extruder [0111], or the extruder having 50 mm internal diameter (example 1, [0263]). Birch et al. and Allen et al. are analogous arts because they are in the same field of endeavor, namely, a process of making the detergent composition comprising the extrusion process. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the extruder having 50 mm internal diameter in the teaching of Allen et al. in the teaching of Birch et al.. The motivation would be to have more holes of the required size from the extruder, so that the extrusion process will be faster.

Regarding claim 5, Birch et al. teach the process of making perfume particles. Birch et al. do not clearly teach of using low shear for preheating the composition. Allen et al. teach the process of making detergent composition comprising step of heating the composition above the ambient temperature, above 30 or 40 degree of Celsius before performing the extrusion in the mould [0074- 0076]. Official notices using low shear in pre-heater is well known. At the time of the invention, it would be obvious to one of

Art Unit: 1796

ordinary skill in the art to use the low shear in pre-heater to produce the desired product without decomposing it.

Regarding claim 6, Birch et al. teach the process of making perfume particles comprising extrusion. However, Birch et al. do not teach of using the extruder having internal diameter greater than 60 mm. Allen et al. teach the method of making the detergent tablet using the twin screw extruders [0111] which is well known to have the screw diameter of from 40 mm to 125 mm. Birch et al. and Allen et al. are analogous arts because they are in the same field of endeavor, namely, a process of making the detergent composition comprising the extrusion process. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use one of the well known twin screw extruder having the same diameter as recited in claim 6 in Birch et al.. The motivation would be to have more holes of the required size, so that the extrusion process will be faster.

Regarding claim 8, Birch et al. teach the process of making perfume particles, wherein the water soluble encapsulating material is present in an amount of from 40 to 60 percent by weight of the composition [0081].

Regarding claim 9, Birch et al. teach the process of making perfume particles, wherein the aqueous solution or water is present in an amount of from 0 percent [0084], up to 47 percent in the encapsulating material (example 1, p. 8).

Regarding claim 10, Birch et al. teach the process of making perfume particles, wherein the monomer making the core is present in an amount of from 10 to 40 percent

Art Unit: 1796

by weight of the monomer mixture [0035], which makes a slurry mixture in the core making process [0062].

Regarding claim 11, Birch et al. teach the process of making perfume particles, wherein the perfume is present in an amount of from 5 to 50 percent by weight of the particle [0053].

Regarding claim 12, Birch et al. teach the process of making perfume particles, wherein the particles comprise pigments and dyes [0082].

Regarding claim 13, Birch et al. teach the process of making perfume particles, wherein the extruded material is cut by the blade to produce particle in desired size [0090].

Regarding claim 14, Birch et al. teach the process of making perfume particles, wherein the slurry in the extruder is heated up to 140 degree of Celsius to remove the excess water (example 9, p. 10).

Response to Arguments

According to the applicant's argument of the rejection of claims 1, 5 - 6, and 8 - 14, Birch et al. (US. 2003/0180340) do not disclose the process comprising preheating step. Although Birch et al. (US. 2003) do not clearly say of using step of preheating to remove the excess water, in paragraph [0141] Birch et al. mentioned that the excess water is removed in stages 3 to 5, and stages 3 to 5 is held at 140 degree of Celsius (see paragraph 0137).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

THA